

	Cronbach's Alpha
AQ	.808
QCAE Perspective taking	.922
QCAE Online simulation	.894
QCAE Emotion contagion	.715
QCAE Proximal responsivity	.495
QCAE Peripheral responsivity	.636
IRI Perspective taking	.771
IRI Empathic concern	.570
IRI Personal distress	.782
IRI Fantasy	.755
NEO Neuroticism	.856
NEO Extraversion	.820
NEO Openness	.433
NEO Agreeableness	.702
NEO Conscientiousness	.807

**Supplementary Table S1.** Cronbach's Alpha of each scale in AQ, QCAE, IRI and NEO.

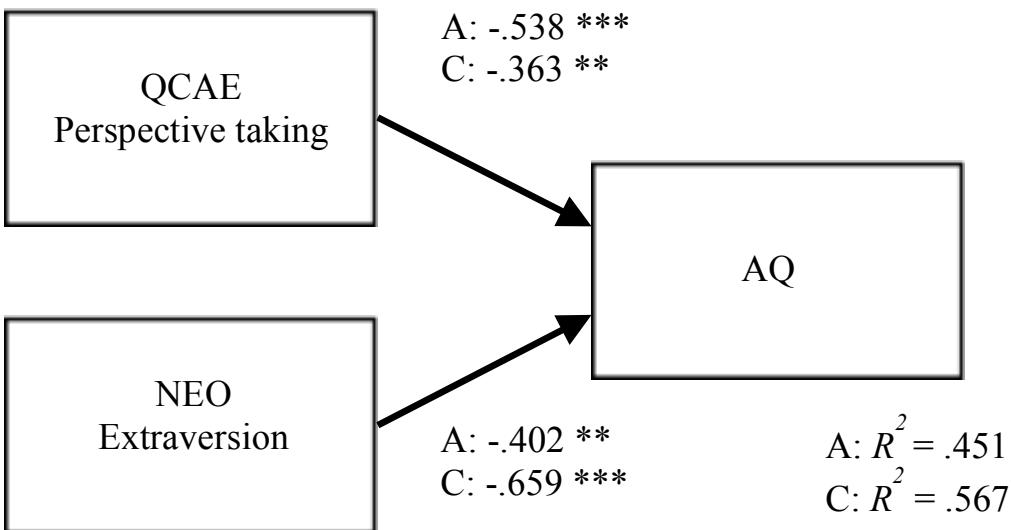
AQ: Autism-Spectrum Quotient. IRI: Interpersonal Reactivity Index. NEO: NEO Personality

Inventory-Revised. QCAE: Questionnaire of Cognitive and Affective Empathy.

	Unstandardized coefficients B	Standardized coefficients Beta	t values	p-values	VIF
(Constant)	60.065 (2.951)		20.355	0.000 ***	
NEO Extraversion	-.430 (.058)	-.556	-7.430	0.000 ***	1.141
QCAE Perspective taking	-.573 (.085)	-.504	-6.746	0.000 ***	1.141

Excluded	t values	p-values	VIF
QCAE Online simulation	0.749	0.458	2.599
QCAE Emotion contagion	1.305	0.198	1.013
QCAE Proximal responsivity	1.359	0.180	1.136
QCAE Peripheral responsivity	0.415	0.680	1.507
IRI Perspective taking	-0.783	0.438	2.358
IRI Empathic concern	-0.050	0.960	1.113
IRI Personal distress	0.202	0.841	1.173
IRI Fantasy	0.303	0.763	1.107
NEO Neuroticism	2.841	0.007	1.189
NEO Openness	2.381	0.021	1.119
NEO Agreeableness	-0.604	0.549	1.053
NEO Conscientiousness	-0.062	0.951	1.320

**Supplementary Table S2.** Contributory factors to AQ scores by multiple regression analysis with stepwise linear regression method. B: multiple correlation coefficients. The number in the parenthesis is standard errors.  $\eta^2$ : Semi-partial eta-squared. Effect size represents a sample-based estimate of the quality. VIF: variance inflation factor. NEO: NEO Personality Inventory-Revised. QCAE: Questionnaire of Cognitive and Affective Empathy. \*\*\* $p < 0.001$ .



**Supplementary Figure S1. Multiple group structural equation modeling: Comparison of the association between perspective taking, extraversion and autistic traits in people with or without ASD .**

A: ASD group (n = 24). C: Non-ASD control group (n = 28). AQ: Autism-Spectrum Quotient. NEO: NEO Personality Inventory-Revised. QCAE: Questionnaire of Cognitive and Affective Empathy. Values with asterisk are standardized coefficients.  $^{**}p < 0.01$ ,  $^{***}p < 0.001$ .  $R^2$ : R Square. CMIN: Chi-square statistics. CFI: Comparative Fit Index. AGFI: Adjusted Goodness-Fit Index. GFI: Goodness-Fit Index. RMSEA: Root Mean Square Error of Approximation. AIC: Akaike's Information Criterion.